



June 2013

MILITARY AIRLIFT

DOD Needs to Take Steps to Manage Workload Distributed to the Civil Reserve Air Fleet

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GAO Highlights

Highlights of [GAO-13-564](#), a report to congressional committees

Why GAO Did This Study

To move passengers and cargo, DOD supplements its military aircraft with cargo and passenger aircraft from volunteer commercial carriers participating in the CRAF program. Participating carriers commit their aircraft to support a range of military operations in exchange for peacetime business. A House Armed Services Committee mandated GAO to report on matters related to the CRAF program. GAO assessed whether DOD (1) met its military airlift training requirements while also using CRAF participants to the maximum extent practicable, (2) provided justification for restricting commercial carriers from transporting partial plane loads of cargo over certain routes, and (3) has established future requirements for CRAF and how the planned size of CRAF compares to those requirements. GAO reviewed guidance and policies pertaining to the program, flying hour data, and DOD-sponsored CRAF study reports. GAO also interviewed DOD and industry officials.

What GAO Recommends

GAO recommends that the Secretary of Defense direct the Secretary of the Air Force and the Commander, U.S. Transportation Command—in conjunction with the Commander, Air Mobility Command—to use its existing processes for monitoring training to determine when it can shift its distribution of peacetime airlift workload from military to commercial sources. In comments on a draft of this report, DOD concurred with GAO's recommendation and stated that it believes implementing the recommendation will further improve the Civil Reserve Air Fleet program.

View [GAO-13-564](#). For more information, contact Zina Merritt at (202) 512-5257 or merrittz@gao.gov.

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What GAO Found

DOD exceeded the flying hours needed to meet military training requirements for fiscal years 2002 through 2010 because of increased operational requirements associated with Afghanistan and Iraq; however it does not know whether it used Civil Reserve Air Fleet (CRAF) participants to the maximum extent practicable. DOD guidance requires it to meet training requirements and to use commercial transportation to the "maximum extent practicable." During fiscal years 2002 through 2010, DOD flew its fleet more than needed to train its crews, although its flying has more closely matched its training needs in recent years. DOD has also used CRAF participants extensively to supplement military airlift. Although DOD has taken steps to make more airlift business available to CRAF participants, officials said that overseas operations have provided enough missions to support both training and CRAF business obligations. However, with the drawdown in Afghanistan, DOD officials expect the need for airlift to decline by at least 66 percent—to pre-September 2001 levels—reducing both training hours available for DOD and business opportunities for CRAF. DOD does not use its process for monitoring flying hours to determine when it will exceed required training hours and allocate eligible airlift missions to CRAF participants. Therefore, it cannot determine whether it is using CRAF to the maximum extent practicable. As a result, DOD may be using its military fleet more than necessary—which officials say is less economical—while risking reduced CRAF participation.

DOD provided several reasons for restricting commercial carriers from transporting partial plane loads of cargo over channel routes, including the need to promote efficiency, meet its military airlift training requirements, and fulfill peacetime business obligations to CRAF participants. Channel route missions are regularly scheduled airlift missions used to transport cargo and provide aircrew training time. These missions also help DOD provide business to CRAF participants. According to U.S. Transportation Command (TRANSCOM) officials, DOD generally requires aircraft conducting channel route missions to be completely full of cargo before takeoff. The policy restricting carriers from flying partial loads over channel routes allows DOD to consolidate cargo previously flown by commercial carriers in less than full plane loads and redirect that cargo into the channel route system, where it will be transported by either commercial or military aircraft as part of a full plane load mission. According to DOD, consolidating cargo into full loads flown over the channel route system has increased both the efficiency of these missions and the availability of missions that DOD uses to train its crews and fulfill its business obligations to CRAF.

It is unclear whether the planned size of CRAF will be adequate to meet future airlift requirements. DOD last established its future requirements based on the wartime scenarios in the Mobility Capability Requirements Study 2016, issued in 2010. However, due to changing military strategy and priorities, the 2010 study does not reflect current mission needs. The National Defense Authorization Act for Fiscal Year 2013 requires DOD to conduct a new mobility capabilities and requirements study. DOD has not begun this study or finalized its ongoing reviews of the CRAF program's ability to support future requirements. Once they are finalized, these studies should allow DOD to better understand future requirements for CRAF and whether the CRAF program will meet future airlift requirements.

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Abbreviations

AMC	Air Mobility Command
CRAF	Civil Reserve Air Fleet
DOD	Department of Defense
MCRS	Mobility Capability Requirements Study
MRCS	Mobility Requirements and Capability Study
NDAA	National Defense Authorization Act
REMIS	Reliability and Maintainability Information System
TACC	Tanker Airlift Control Center
TRANSCOM	U.S. Transportation Command

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June 20, 2013

Congressional Committees

DOD augments its military cargo and passenger airlift capability with aircraft from commercial carriers participating in the Civil Reserve Air Fleet (CRAF) program. Participating carriers commit their aircraft to be called upon, or activated,¹ for use to support a range of military operations. The U.S. government provides commercial carriers with economic incentives to encourage their participation in CRAF, by giving them the opportunity to transport DOD personnel and cargo in peacetime and by reserving a number of additional airlift contracts for CRAF carriers, such as the U.S. General Services Administration's City Pairs program and the U.S. Transportation Command-managed World Wide Express program. Since 2001, CRAF participants have received nearly \$30 billion in revenue for providing peacetime airlift services to DOD.² In fiscal year 2012, CRAF participants received approximately \$2 billion in payments from DOD for their peacetime participation. However, DOD projects that by 2015, its peacetime business will decline by an estimated 66 percent as it returns to pre-September 11, 2001 levels, raising concerns within DOD and among CRAF participants about the effect this loss of business will have on the carriers and their ability to continue participating in the program. The Office of the Deputy Assistant Secretary of Defense for Transportation Policy serves as the principal advisor for establishing policies and providing guidance to DOD components for efficient and effective use of government and commercial transportation resources. DOD's U.S. Transportation Command (TRANSCOM), headquartered at Scott Air Force Base in Illinois, manages many aspects of the CRAF program and makes recommendations concerning the capability, capacity, and other requirements for mobility assets needed to execute TRANSCOM's mission.

¹Aircraft committed to the CRAF program can be activated during a war-time or emergency scenario under a stage I, II, or III CRAF activation. In exchange for participation in the program, carriers are eligible to fly peacetime airlift missions under a non-activated status.

²DOD refers to any business performed by CRAF participants outside of an activation as commercial augmentation, otherwise referred to as "peacetime business" throughout this report. DOD's last CRAF activation occurred from February to June 2003 at the start of Operation Iraqi Freedom.

According to TRANSCOM officials, CRAF benefits the nation by providing up to half of the nation's long-range airlift capability, allowing the government to avoid having to buy additional aircraft, pay personnel costs, or maintain the aircraft during peacetime. The National Airlift Policy emphasizes the importance of CRAF to the nation by noting that military and commercial resources are equally important and interdependent in the fulfillment of the national defense airlift objective.³ Consistent with that policy, DOD Instruction 4500.57 requires that DOD operate its fleet to meet its training requirements while also using commercial sources of transportation to the "maximum extent practicable."⁴ According to Air Mobility Command (AMC) officials, airlift missions that are not conducted to satisfy training requirements should be performed by CRAF participants, except when there is some other feature of the mission that requires military airlift. Further, since DOD's military fleet has limited capability to meet its passenger airlift requirements, it mostly relies on CRAF commercial carriers to fulfill these requirements. DOD's military fleet has the capability to carry bulk, outsized, and oversized cargo; however, DOD relies on commercial cargo carriers to move a portion of its bulk cargo both in peacetime and in times of crisis or war.

Over the last several years, we and others have reported on the challenges faced by the CRAF program. In September 2009, we recommended that DOD assess the level of risk associated with the commercial carriers' declining charter passenger capabilities and DOD's increased need to move very large cargo. DOD did not agree with our recommendation because, it stated, an assessment of the declining charter passenger capabilities had already been done in 2008 by the Institute for Defense Analysis; however, as we stated in our report, the assessment conducted by the Institute for Defense Analysis on DOD's behalf did not include the most current and relevant data affecting the program; for that reason we believe our recommendation is still viable and important. Additionally, we recommended that, given the importance of the CRAF program in moving passengers and cargo to support

³See National Security Decision Directive 280, National Airlift Policy (June 24, 1987) (hereinafter cited as National Airlift Policy (June 24, 1987)). As described by the policy, the national defense airlift objective is to ensure that military and civil airlift resources will be able to meet defense mobilization and deployment requirements in support of U.S. defense and foreign policies. See *id.*

⁴See Department of Defense Instruction 4500.57, Transportation and Traffic Management (Mar. 18, 2008) (hereinafter cited as DODI 4500.57 (Mar. 18, 2008)).

peacetime, contingency, and major operations, DOD should develop appropriate policies and procedures for mitigating risks regarding the CRAF program in order to maintain its viability to meet DOD's future needs.⁵ DOD agreed that there is a need for comprehensive policy governing all of the CRAF program elements identified in our report; however DOD did not identify what, if any, specific actions it would take in response to our recommendation. However, DOD updated some of its guidance regarding the CRAF program in 2011, and in fiscal year 2012, AMC began a series of studies that may begin to address this recommendation. Further, multiple DOD-sponsored studies have identified risks to the CRAF program resulting from a changed business environment and an expected decrease in CRAF participation—especially in the level of charter airline participation—as DOD's airlift workload declines.⁶

House Report 112-479, accompanying a bill for the National Defense Authorization Act for Fiscal Year 2013, mandated us to report to the congressional defense committees on matters related to the long-term ability of CRAF to meet DOD's needs.⁷ Accordingly, we assessed the extent to which DOD has (1) met its military airlift training requirements while also using CRAF participants to the maximum extent practicable, (2) provided justification for restricting commercial carriers from transporting partial plane loads of cargo over certain routes, and (3) established future requirements for the CRAF program, and how the planned size of CRAF compares to those requirements.

To assess the extent to which DOD has met its military airlift training requirements while also using CRAF participants to the maximum extent practicable, we analyzed policies, regulations and guidance pertaining to the management of the CRAF program. We also analyzed DOD's training requirements for its flying hour program to determine the number of hours DOD flew its strategic airlift fleet compared to the number of hours it was

⁵GAO, *Military Airlift: DOD Should Take Steps to Strengthen Management of the Civil Reserve Air Fleet Program*, [GAO-09-625](#) (Washington D.C.: Sept.30, 2009).

⁶Institute for Defense Analysis: *Civil Reserve Air Fleet: Economics and Strategy*, IDA paper P-4373; August 22, 2008; Council for Logistics Research, *Civil Reserve Air Fleet Study Report*, July 31, 2008.

⁷See H.R. Rep. No. 112-479, at129-30 (2012).

required to fly to meet training requirements over the last 10 years.⁸ In addition, we conducted interviews with officials from TRANSCOM, AMC, and The Office of the Under Secretary of Defense for Acquisition, Technology and Logistics to understand how DOD decides whether to use the military fleet or commercial airlift. We also interviewed officials from 21 of the 30 CRAF carriers who were participating in the program as of October 2012, as well as representatives from the National Air Carrier Association—an industry association representing several CRAF participants—to understand the perspectives of commercial participants in the CRAF program. To assess the extent to which DOD provided justification for restricting commercial carriers from transporting partial plane loads of cargo over certain routes, we reviewed DOD policies that place restrictions on commercial carriers flying over certain routes. We also reviewed data from fiscal years 2000 and 2012, and interviewed TRANSCOM officials, to obtain information on the rationale and benefits of these restrictions. In addition, we conducted interviews and obtained written responses from CRAF participants to gain an understanding of how such restrictions were affecting their business. To assess whether DOD has established future requirements for the CRAF program and how the planned size of CRAF compares to those requirements, we reviewed studies assessing DOD's strategic airlift capabilities, such as DOD's Mobility Capabilities and Requirements Study–2016, and the Air Mobility Command 2012 CRAF Phase 1 study. We also reviewed data on the number of commercial aircraft committed to DOD's CRAF program and compared these data with DOD's current airlift requirements. Lastly, we interviewed TRANSCOM and AMC officials to determine what steps are being taken to establish future requirements and to gain their perspective on the challenges, if any, they expect to face as they continue to manage the CRAF program.

We conducted this performance audit from August 2012 to June 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence and data obtained was sufficiently reliable for our purposes, and provides a reasonable basis for our findings and conclusions based

⁸We obtained training requirement data on DOD's flying hour program from the Air Mobility Command.

on our audit objectives. More detailed information on our scope and methodology is provided in appendix I.

Background

The Civil Reserve Air Fleet (CRAF) is a voluntary, contract-based agreement between DOD and U.S. commercial air carriers that augments DOD's military airlift capability during times of war and national emergency. It was created in 1951 to augment DOD airlift capability during a national defense-related crisis. The National Airlift Policy, signed by President Reagan in 1987 and still in effect, establishes policy that the military will rely on the commercial air carrier industry to provide the airlift capability required beyond that available in the military airlift fleet.⁹ The policy includes guidelines for meeting airlift requirements in both peacetime and wartime. These guidelines direct, among other things, that policies be designed to increase participation in CRAF and enhance the mobilization base¹⁰ of the U.S. commercial air carrier industry. In exchange for this participation, the government provides commercial carriers the opportunity to fly DOD peacetime missions moving passengers and cargo and also sets aside business for CRAF participants in the General Services Administration City Pairs passenger program and TRANSCOM's Worldwide Express cargo program. CRAF is divided into three progressive stages that TRANSCOM can activate during times of crisis, in part or in whole, with the approval of the Secretary of Defense.

- Stage I covers a minor regional contingency or other situations where AMC cannot simultaneously meet both deployment and other airlift requirements.
- Stage II is tailored for a major theater war or a defense airlift emergency short of a full national emergency.

⁹See National Airlift Policy (June 24, 1987).

¹⁰DOD defines the mobilization base as the total of all resources available, or that can be made available, to meet foreseeable wartime needs. Such resources include the manpower and materiel resources and services required for the support of essential military, civilian, and survival activities, as well as the elements affecting their state of readiness. Joint Chiefs of Staff, Joint Pub. 1-02, Department of Defense Dictionary of Military and Associated Terms, at 189 (Nov. 8, 2010) (as amended through Mar. 15, 2013).

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- Stage III would be required if the military had to fight more than one major theater war at the same time or operate in a larger crisis, including a national emergency declared by the President or Congress. A stage III CRAF activation has never occurred.

DOD has activated CRAF only twice in the history of the program. Stage I and part of stage II were activated in support of Operations Desert Shield and Desert Storm in August 1990 and January 1991, respectively, through May 1991. The CRAF stage I passenger segment was activated in support of Operation Iraqi Freedom in February through June 2003.

To enter the CRAF program, an air carrier must (1) be a U.S. flagged, Federal Aviation Administration approved Part 121 air carrier, (2) be approved by the Commercial Airlift Review Board,¹¹ (3) have one year prior equivalent uninterrupted service to the commercial sector, (4) meet a minimum fleet participation level (for international carriers), (5) meet a specified utilization rate (for international and aeromedical evacuation fleet participants), and (6) be able to meet manning and crew requirements. Once approved to participate, carriers commit the number of aircraft they will make available for each of the three stages of the CRAF program. AMC then decides the number of aircraft that will be accepted into the CRAF program, based on DOD's wartime requirements. As of April 2013, a total of 64 aircraft were committed to stage I, 308 to stage II, and 554 to stage III.

Two segments of the commercial airlift industry—scheduled service carriers and charter carriers—comprise the CRAF wartime capability. The scheduled service carriers—which include large passenger airlines such as American Airlines and Delta Air Lines and cargo carriers such as FedEx and UPS—pledge the majority of the aircraft accepted into the CRAF program. DOD will use most of the pledged aircraft only during a CRAF activation. In peacetime, scheduled service carriers operate commercial flights on regular routes and cannot afford unplanned disruptions to their airline networks. Because many DOD missions are not routine in their locations or timing, charter carriers—which have the flexibility to provide airlift based on their customers' schedules—transport the majority of DOD's peacetime, contingency, and stage I business. For

¹¹The Commercial Airlift Review Board is comprised of DOD senior officials and makes decisions regarding the use or nonuse of air carriers participating or attempting to participate in the DOD air transportation program.

some of the charter carriers, this peacetime business accounts for a significant portion of their total business revenue. However, because scheduled service carriers have large fleets, they are also a critical component of CRAF, and they provide the bulk of the CRAF strategic reserve in the event of a CRAF activation.

The primary incentive for commercial carriers to participate in the CRAF program is the opportunity to obtain DOD peacetime business. DOD distributes peacetime business to CRAF participants using an entitlement process. CRAF carriers are awarded points based on the number of aircraft they commit to the program, the stage to which these aircraft are assigned, and other considerations as applicable to the individual airline.¹² The amount of peacetime business CRAF participants are entitled to is determined in advance of any missions awarded. DOD makes this business available to the CRAF carriers to fulfill its peacetime business obligation to them, and it does so by offering the carriers the opportunity to fly various missions (for a list of all CRAF carriers, see appendix III).

TRANSCOM and AMC share responsibility with respect to CRAF policy. TRANSCOM validates the requirements for the movement of personnel and cargo, determines which transportation mode will be used for these movements, and distributes the work to the appropriate component command. Once TRANSCOM determines that a movement will go by air, the mission requirement is handled by AMC. Within AMC, the Tanker Airlift Control Center (TACC) normally handles mission planning, assignment of airlift assets, mission control, and tracking. Mission planning includes determining whether military or commercial aircraft will fly a mission. CRAF carriers generally have priority over non-CRAF carriers for movements of passengers and cargo.

¹²To incentivize participation in the CRAF program, DOD awards CRAF carriers mobilization value points. Upon commitment and acceptance to the CRAF program, the CRAF carrier's aircraft are assigned mobilization value points based on factors including range, payload, and productive utilization rate, essentially determining the value of each aircraft to the program. These points are used to determine the amount of peacetime business CRAF carriers will be awarded.

The Fly CRAF Act generally requires DOD to use CRAF carriers when contracting for airlift services, whenever the carriers are available.¹³ If no CRAF participant is available to supply the airlift, DOD may use a non-CRAF carrier (either U.S. or foreign flagged) to fly the mission.¹⁴ For airlift services between two locations outside the United States, CRAF carriers must be used as long as they are “reasonably available.” Only foreign carriers operate larger aircraft, such as the AN-124 and IL-76, which are designed to carry outsized and oversized cargo that U.S. commercial carriers normally cannot accommodate.¹⁵ However, according to TRANSCOM officials, DOD uses foreign carriers through subcontracts with CRAF participants, and only rarely contracts directly with foreign carriers. DOD interprets the Fly CRAF Act as applying only to contracts that are specifically for airlift services, and not to contracts for services or supplies that may involve airlift or other transportation services. For example, according to TRANSCOM, DOD does not require “The Fly CRAF preference” to be applied to service or supply contracts such as the Logistics Civil Augmentation Program or the Defense Logistics Agency Prime Vendor Program. According to DOD officials, the current law and related contracting provisions provide the department with the

¹³See 49 U.S.C. § 41106. The Fly CRAF Act applies to the transportation of passengers or property by CRAF-eligible aircraft obtained by DOD through a contract for airlift services. See § 41106(a)-(c). CRAF-eligible aircraft are aircraft of a type the Secretary of Defense has determined to be eligible to participate in the CRAF program. See § 41106(e). Subject to carrier availability, such transportation may be provided only by carriers that hold a certificate issued under section 41102 and either have aircraft in CRAF or offer to place aircraft in CRAF. See § 41106(a)-(c).

¹⁴Even where a CRAF carrier is unavailable, DOD may be required to use an available U.S. carrier pursuant to the Fly America Act. See 49 U.S.C. § 40118.

¹⁵Oversized cargo is air cargo that exceeds the dimensions of a standard (463L) pallet, but is air transportable on military and some civilian or foreign cargo carriers. Outsized cargo exceeds the dimensions of oversized cargo and requires the use of a military C-5 or C-17 aircraft, foreign owned capable aircraft, or surface transportation.

flexibility to acquire the best value for products and services when executing service or supply contracts.¹⁶

DOD's Process for Monitoring Flying Hours Provides Information That Could Help It Determine When to Shift Eligible Missions to CRAF Participants

DOD has exceeded the flying hours needed to meet military training requirements for fiscal years 2002 through 2010 due to increased operational requirements associated with Afghanistan and Iraq; however it does not know whether it used CRAF participants to the maximum extent practicable during this period. In fiscal years 2010 through 2012, DOD's flying hours have more closely matched its training plan. In keeping with its policy to both provide training within the military airlift system and use commercial sources of transportation to conduct eligible airlift missions, DOD has taken steps to provide CRAF participants with peacetime business. However, DOD does not use information from its process for monitoring flying hours to determine when it will use more hours than it has planned to meet training requirements and shift eligible airlift missions to CRAF participants to ensure that commercial sources are used to the maximum extent practicable, as required by DOD guidance. Unless DOD uses its information on flying hours to determine when it can shift eligible airlift missions to CRAF participants, it may be flying its military fleet unnecessarily. DOD officials say that using the military fleet to fly missions that are eligible to be shifted to CRAF participants is more expensive than using the CRAF carriers and could reduce these carriers' level of participation in the CRAF program.

¹⁶For example, DOD officials pointed to Defense Federal Acquisition Regulation Supplement section 247.301-71, which applies to supply contracts that will include a significant requirement for transportation of items outside the continental United States. In these circumstances, the source selection evaluation criteria for award of the supply contract should include an evaluation factor or subfactor that favors suppliers, third-party logistics providers, and integrated logistics managers that commit to using carriers that participate in certain readiness programs, including CRAF. See Memorandum from the Under Secretary of Defense for Acquisition, Technology, and Logistics, Transportation within Supply Contracts (July 28, 2011) (citing 48 C.F.R. (DFARS) § 247.301-71).

DOD Exceeded Its
Required Military Training
Hours for Fiscal Years 2002
through 2010, but Has
Reduced the Percentage of
Excess Hours in Recent
Years

The National Airlift Policy states that the “Department of Defense shall establish appropriate levels for peacetime cargo airlift augmentation in order to promote the effectiveness of the Civil Reserve Air Fleet and provide training within the military airlift system.”¹⁷ Consistent with that policy, DOD Instruction 4500.57 requires that DOD operate its fleet to meet its training requirements and also requires that it use commercial sources of transportation to the “maximum extent practicable.”¹⁸ DOD officials stated that they have been using military airlift beyond what was planned, because the operations in Afghanistan and Iraq created additional airlift requirements, many of which could not be met using U.S. commercial sources. For example, some kinds of cargo—such as the mine resistant ambush protected vehicles—are too large to fit inside the aircraft operated by CRAF participants. Military aircraft, along with some foreign aircraft such as the AN-124 and the IL-76, are able to accommodate these kinds of cargo. Additionally, missions in Afghanistan and Iraq often could not be flown by CRAF participants because of airspace restrictions on U.S. carriers operating in those countries. Finally, some missions have additional requirements that call for the use of military airlift, such as requirements that cargo be escorted by military personnel or that an aircraft land on an unpaved runway.

Every year, DOD develops requirements for its military aircrews that serve as the basis for its flying hour program. The flying hour program provides training and experience for the aircrews. These requirements consist mainly of two types of flying hours—“currency hours” and “experiencing hours.” Training flights conducted to log currency hours generally do not carry cargo or passengers and therefore do not compete with commercially-operated missions. On the other hand, experiencing, or “time in the air,” flights typically carry cargo or passengers and compete with commercially-operated missions. Officials told us that currency hour flights account for roughly 20 percent of the flying hour requirement and are funded through operations and maintenance funds, while experiencing hour flights account for approximately 80 percent of the requirement. We excluded currency hours from our analysis, since flights that provide these training hours generally do not compete for cargo or passengers with commercially-operated missions. However, flights that provide experiencing hour training are funded through the Transportation

¹⁷See National Airlift Policy (June 24, 1987).

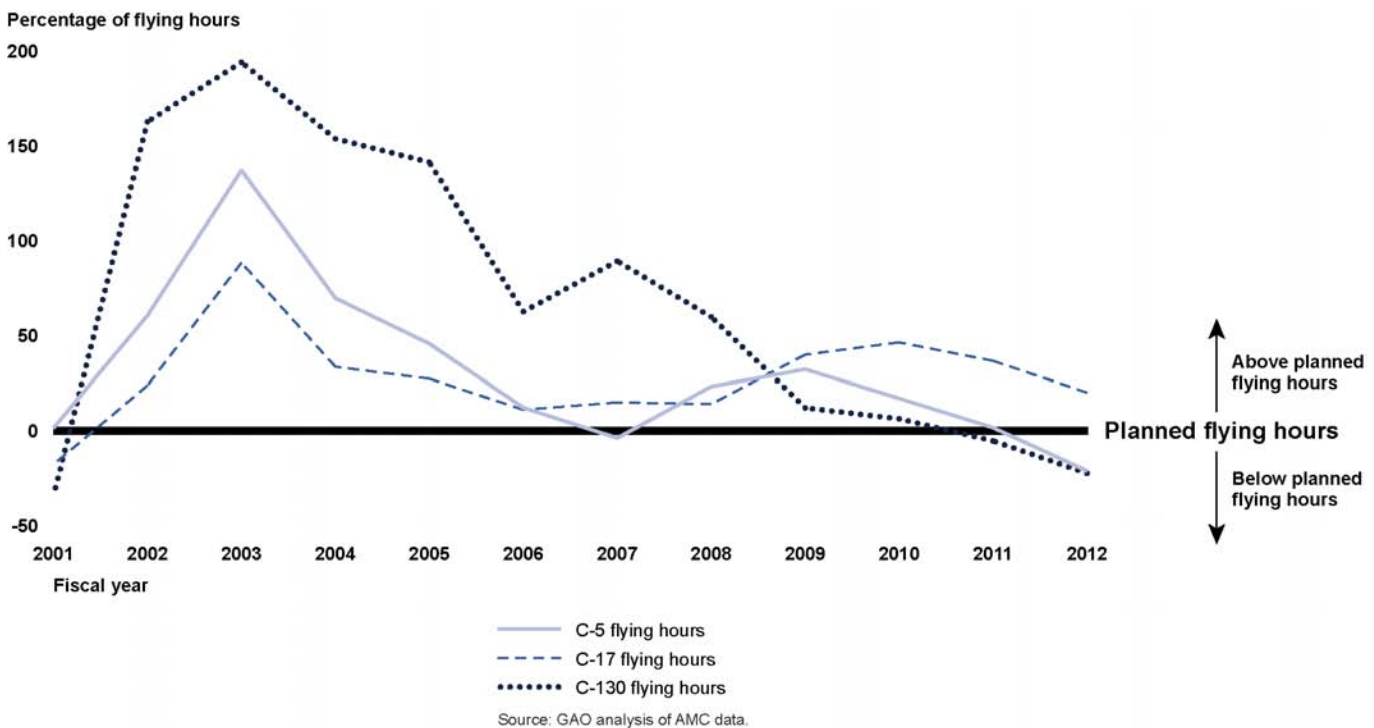
¹⁸DODI 4500.57, paras. 4.4, 4.4.4 (Mar. 18, 2008).

Working Capital Fund, because these flights carry cargo or passengers. As a revolving fund account,¹⁹ the Transportation Working Capital Fund relies on customer reimbursements in exchange for transportation services provided. The customer that requests airlift reimburses the fund for the mission performed, although some costs associated with mobilization capability and readiness may be funded by the Air Force. For the purposes of this report, “military airlift training requirements” refers to experiencing hours, because those hours are the ones that DOD must decide how to allocate to meet military airlift training requirements while also using CRAF participants to the maximum extent practicable.

Figure 1 shows the percentage by which AMC has exceeded the flying hours that it planned for experiencing requirements in fiscal years 2001 through 2012. DOD said that during these years it exceeded its flying hours for training because of the need to fly missions to support operations in Iraq and Afghanistan. To develop this chart, we compared AMC’s requirements for experiencing flying hours to the actual hours AMC flew with the primary airlift platforms—the C-5, C-17, and C-130—and expressed them as percentages of the planned flying hours. We excluded the tanker aircraft from this analysis, since there are no commercial aircraft in the CRAF program that are comparable to the KC-10 or KC-135.

¹⁹A “revolving fund” is a fund established to finance a cycle of businesslike operations through amounts received by the fund. A revolving fund charges for the sale of products or services and uses the proceeds to finance its spending, usually on a self-sustaining basis.

Figure 1: Percentage by Which Actual AMC Flying Hours Exceeded Planned AMC Flying Hours in Fiscal Years 2001–2012



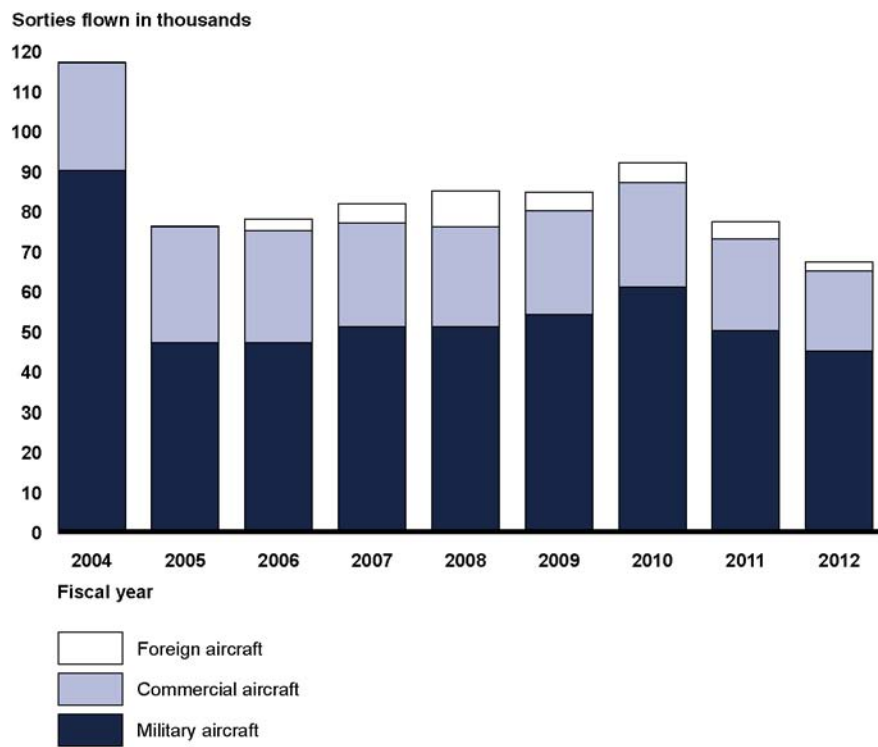
Note: The flying hours in this chart include only Transportation Working Capital Fund hours that are used for experiencing training and airlift movements. DOD balances these airlift movements between commercial and military aircraft.

DOD Has Taken Steps to Provide CRAF Participants with Peacetime Business

Recognizing the importance of the commercial carriers for meeting its future airlift requirements, DOD has taken steps to increase the amount of peacetime business it gives to CRAF participants. According to TRANSCOM's Fiscal Year 2012 Annual Report,²⁰ CRAF carriers remain essential in supplying transportation services and provide a critical part of DOD's warfighting deployment capability. Further, TRANSCOM and AMC are using CRAF carriers to more directly support the forces in Afghanistan. CRAF participants have provided the majority of passenger movements and about a quarter or more of all cargo movements since fiscal year 2004. Figures 2, 3, and 4 show the extent to which DOD has relied on CRAF participants to provide airlift services.

²⁰TRANSCOM, *United States Transportation Command 2012 Annual Report*.

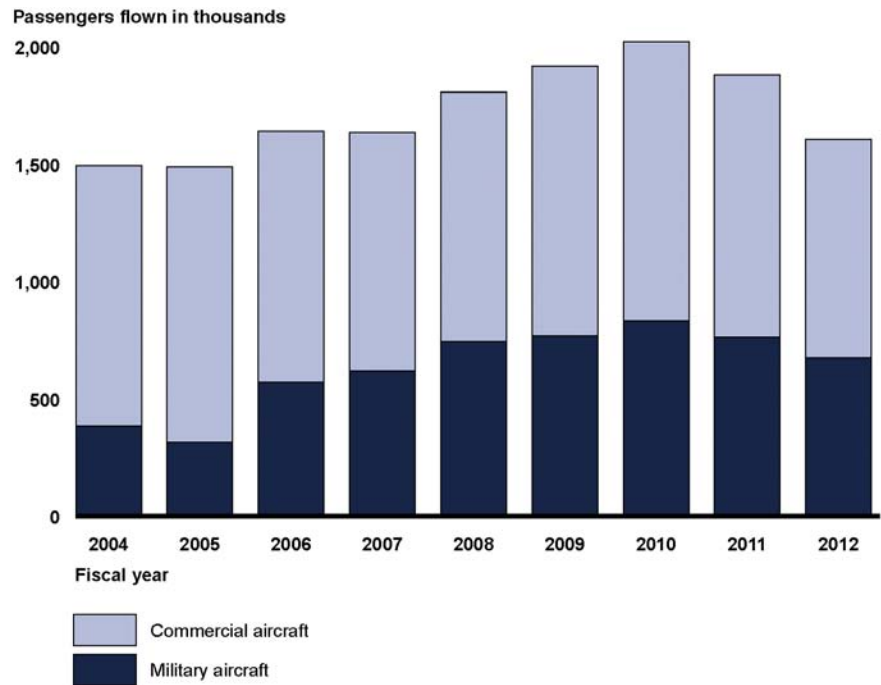
Figure 2: AMC-Managed Sorties Flown in Fiscal Years 2004–2012, by Airlift Source



Source: GAO analysis of AMC data.

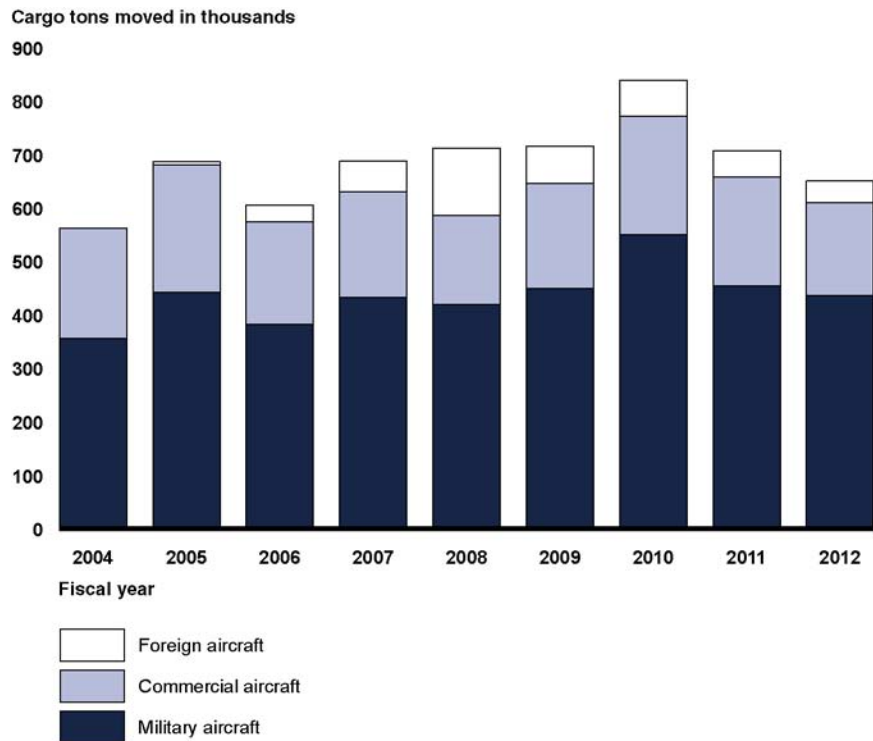
Note: A sortie is defined as the takeoff and landing of one aircraft.

Figure 3: Passengers Flown on AMC-Managed Flights in Fiscal Years 2004–2012, by Airlift Source



Source: GAO analysis of AMC data.

Figure 4: Cargo Tons Flown on AMC-Managed Flights in Fiscal Years 2004–2012, by Airlift Source



Source: GAO analysis of AMC data.

Over the last few years, both the number of CRAF participants and the number of aircraft pledged to the CRAF program have fluctuated, and it is not clear what level of support CRAF participants will provide in the future. For example, as we noted in our 2009 report on CRAF,²¹ the number of charter aircraft enrolled in the CRAF program had declined from more than 60 aircraft in 2003 to as few as 19 in April 2008, before stabilizing at 29 charter aircraft in May 2008. Our analysis shows that CRAF participation as of fiscal year 2012 was still sufficient to allow DOD to meet its wartime requirements. However, according to some current CRAF participants, changes to the business environment, such as the ongoing economic down-turn, have resulted in five of the participating

²¹GAO, Military Airlift: DOD Should Take Steps to Strengthen Management of the Civil Reserve Air Fleet Program, [GAO-09-625](#) (Washington, D.C.: Sept. 30, 2009).

carriers filing for bankruptcy over the last three years. Two of these carriers have already completely ceased providing airlift services. Table 1 shows the level of airlift support provided by CRAF participants and military aircraft during the last three years.

Table 1: Level of Airlift Support Pledged by CRAF Participants for Stage 3 in Fiscal Years 2011–2013

Civil Reserve Air Fleet (CRAF) Support		2011	2012	2013 ^b
Participating Carriers		35	31	28
Number and Type of Aircraft Pledged to CRAF	Passenger	686	823	392
	Cargo	175	163	162
	Aeromedical ^a	39	39	0

Source: GAO analysis of Air Mobility Command data.

Note: Aircraft noted above are included in the International Segment (Long Range & Short Range), Aeromedical Segment, and National Segment (including Domestic and Alaskan sections). In fiscal year 2011, TRANSCOM implemented changes to the CRAF program limiting the number of aircraft that would be accepted into the program.

^aThe Aeromedical requirement was reduced in fiscal year 2013 and currently no carriers are pledged to this segment.

^bAircraft enrolled in the CRAF program as of April 2013.

To support increasing the amount of business provided to CRAF participants, TRANSCOM has created a new organization called the Enterprise Readiness Center. According to an official with the Enterprise Readiness Center, one of the goals of the center is to explore ways to encourage DOD organizations, like the Defense Logistics Agency, to direct more air cargo business into the DOD-managed Defense Transportation System. Further, the center will also seek to preserve DOD’s airlift readiness capability, given the reduction in airlift volume, and to help DOD maintain efficiencies by ensuring that the Defense Transportation System is the primary source used by DOD entities to arrange transportation. To achieve this, the Enterprise Readiness Center proposes to improve the usage process of the Defense Transportation System, create flexible rates, minimize overhead as a way to reduce rates, develop customer-based transportation solutions, and create an active dialogue with CRAF participants. As a way to further strengthen communications and the strategic relationship between DOD, the Department of Transportation, and CRAF participants, TRANSCOM and AMC also established an Executive Working Group in 2010. The Executive Working Group is a discussion forum used to address general issues related to the CRAF program. The working group’s meetings are a forum for providing updates regarding efforts related to the CRAF

program, such as updates on various studies, the status of efforts related to CRAF, and carrier concerns.

DOD officials also told us that they have taken additional steps over the last few years to improve the distribution of business within the CRAF program. TRANSCOM has revised its process for awarding points over the last few years to award more bonus points to carriers that fly additional peacetime missions, assume a greater risk of activation, and operate more modern, fuel-efficient aircraft. TRANSCOM has also revised the practice of awarding commissions. Larger carriers allow the smaller carriers on their teams²² the benefit of using their points to obtain DOD business, in exchange for commissions consisting of a percentage of the revenue the smaller carriers earn from this business. These commissions are one of the ways in which larger carriers earn revenue from the CRAF program, since they do not conduct many of the actual airlift missions in peacetime. However, according to an official at one carrier, these commissions had risen to as high as 9 percent of the revenue earned from the mission. TRANSCOM officials told us that they have capped the value of these commissions at 5 percent of mission revenue, in an attempt to ensure that smaller carriers earn enough profit from performing peacetime airlift missions.

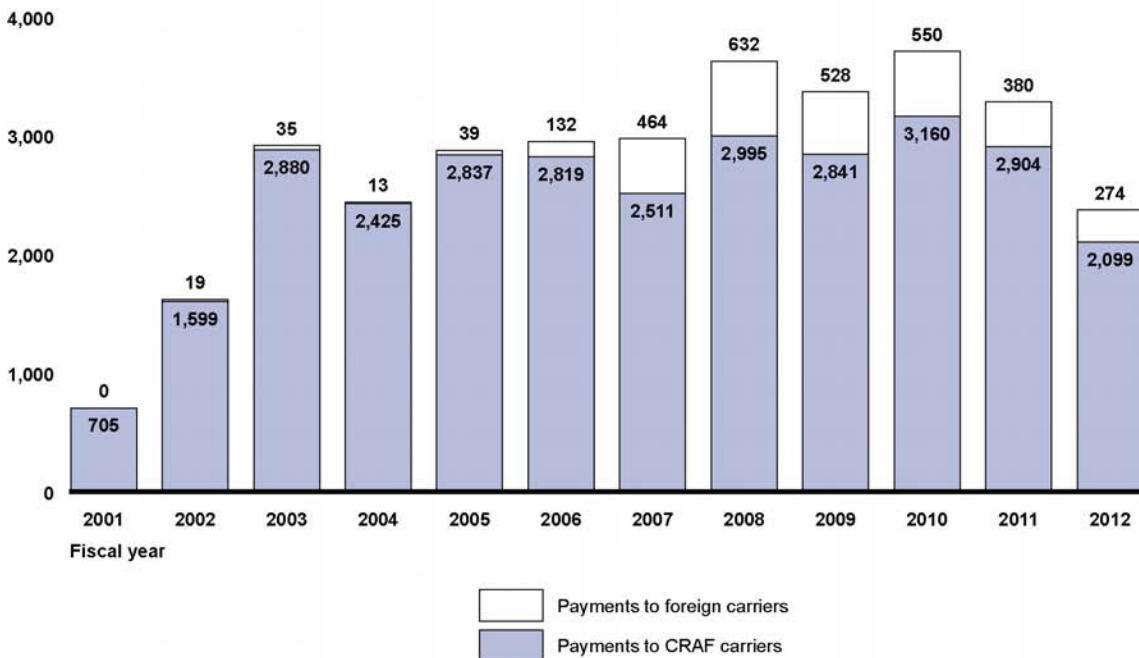
DOD intended for these efforts to strengthen the viability of the CRAF program. The opinions of CRAF participants varied on the extent to which these changes made the program more equitable, mostly depending on whether the carrier directly benefited from the changes. All of the carriers we spoke with indicated that they were planning to stay in the CRAF program for the immediate future. However, some added that if the revenue they were receiving decreased too much, they would reassess their participation and would consider not participating in future years. More than half of the CRAF participants we interviewed suggested that DOD could do more to increase the peacetime business it provides to them. Some of these carriers suggested that DOD's use of foreign air carriers should be curtailed. According to DOD officials, foreign carriers

²²To maximize the value of entitlements, CRAF participants form teaming arrangements, which are created and managed by the participants themselves. The teams are comprised of a mix of passenger and cargo carriers that join together to pool their entitlements to DOD business; that is, the entitlement directly associated with a carrier's individual commitment is combined with the entitlements earned by other carriers on its team. DOD assigns peacetime business to the team based on the team's total entitlement and availability.

primarily operate as sub-contractors to CRAF participants to move cargo that is too large for standard U.S. commercial aircraft, and only in rare cases would DOD contract directly with a foreign carrier. Furthermore, our analysis indicates that the use of foreign carriers has declined since its high point in fiscal year 2008. As shown in figure 5, payments made to foreign carriers have declined by more than 55 percent since fiscal year 2008.

Figure 5: DOD Payments Made to CRAF Participants and Foreign Carriers in Fiscal Years 2001–2012

Fiscal year 2012 dollars in millions



Source: GAO analysis of TRANSCOM data.

DOD Does Not Use Its Process For Monitoring Training Hours to Inform Its Allocation of Eligible Airlift Missions to CRAF Participants

DOD does not use its process for monitoring flying hours to determine when it will exceed its planned training hours, and it does not use the information from this process to allocate eligible airlift missions to CRAF participants. As previously noted, DOD guidance requires TRANSCOM to meet its training needs while also using commercial sources of transportation to the “maximum extent practicable.” DOD officials told us that, consistent with this policy, meeting training needs was their priority. However, they also told us that flights provided by CRAF participants are less expensive than military flights, in part because commercial aircraft

are designed to be more fuel-efficient, while military aircraft are designed to carry heavy cargo and land in austere locations. In addition, according to AMC data, once training requirements have been met, using commercial carriers for airlift missions can be less costly than using military aircraft. For example, according to an April 2013 analysis provided by AMC officials, the cost per pound to transport cargo using commercial carriers such as the 747 and MD-11 can be between 22 and 35 percent lower than the cost of transporting the same cargo using military aircraft such as the C-5 and C-17. Currently, airlift requests are handled by different sections within the Tanker Airlift Command Center (TACC), depending on the type of airlift requested. Each of these sections has a different process for choosing whether to use commercial or military airlift to meet the request. Some airlift missions are conducted primarily by military airlift, while others are conducted by commercial sources.

However, while TRANSCOM performs periodic monitoring of the distribution of missions between military and commercial sources, officials acknowledged that this monitoring does not consider the extent to which training requirements have already been met or will be met with planned missions. According to DOD officials, airlift missions that are not conducted to satisfy training requirements should be performed by CRAF participants, except when there is some other feature of the mission that requires military airlift. Knowing when more flying hours are going to be used than are needed to meet training requirements—and using this information to shift eligible airlift missions to CRAF participants—would allow DOD to use commercial sources of transportation to the maximum extent practicable.

DOD officials told us that operations in Iraq and Afghanistan had ensured that there were enough airlift missions available both to support training requirements and to provide adequate peacetime business for CRAF participants. Further, they noted that there are a number of reasons that DOD might exceed its flying hours, such as the need to transport particularly large cargo, special conditions that require military aircraft (such as unpaved runways), and restrictions on U.S. carriers operating in Iraq and most of Afghanistan. Given such requirements, officials questioned the utility of developing a process to monitor the balance between satisfying flying hour training requirements and providing CRAF participants with additional peacetime business; they said that they were uncertain how many additional missions would be eligible to be flown by commercial carriers. However, TRANSCOM and AMC officials have acknowledged that they have not collected data that would allow them to determine how many of these missions could be shifted to CRAF

participants. Furthermore, while we acknowledge that there may be a number of legitimate reasons why military aircraft would have to be used for missions even after training requirements have already been met, it is not clear that such reasons are always present when military airlift is used. For example, AMC completed a study in December that was intended, in part, to address short-term concerns regarding the CRAF program and its participants. This study noted that some missions were flown on military aircraft only because the necessary load plans²³ for commercial aircraft had not been developed in a timely manner—not because of any requirement that the cargo be flown on military aircraft. The study recommended that DOD airlift customers develop commercial load plans to facilitate scheduling of commercial aircraft in these situations. This study acknowledges that some missions currently flown by military airlift could instead be flown by CRAF participants without negatively affecting training hours.

After the drawdown in Afghanistan concludes, the need for airlift is expected to decline, which will reduce both training opportunities and the business available for CRAF participants. In addition, as airlift needs decrease, DOD may need to fly a higher percentage of its channel missions in order to provide its crews with sufficient training opportunities, which could further decrease its use of CRAF participants. DOD officials told us that they expect peacetime business to fall significantly after fiscal year 2015. This decrease has already begun; peacetime revenues of CRAF participants have already dropped by nearly one third, from their high point of approximately \$3 billion in fiscal year 2010 to about \$2 billion in fiscal year 2012, as shown in figure 5. Commercial carriers are projected to be used even less in fiscal year 2013 and beyond, until revenues return to pre-September 11, 2001 levels of \$700 million or less. This represents a potential 66 percent decline in DOD business available to CRAF participants, which may further exacerbate the economic pressures under which CRAF participants are operating.

By not using the information it has on flying hours to help determine when it can allocate eligible airlift missions to CRAF participants, DOD loses the ability to determine whether it is using commercial sources—such as CRAF participants—to the maximum extent practicable, as required by

²³A “load plan” is the plan for how to pack a shipment of cargo so that it will fit safely onto a given aircraft.

DOD guidance. As a result, DOD may be using its military fleet more than necessary thereby risking reduced participation of commercial carriers in the CRAF program.

DOD Restricts Partial Plane Loads on Channel Routes to Promote Efficiency, Meet Training Requirements, and Fulfill Peacetime Business Obligations to CRAF

DOD provided several reasons for restricting commercial carriers from transporting partial plane loads of cargo over certain routes, based on its need to promote efficiency, meet its military airlift training requirements, and fulfill peacetime business obligations to CRAF participants. According to TRANSCOM officials, in 2001, DOD began restricting commercial air carriers from transporting partial plane loads of cargo over certain overseas channel routes in order to improve the efficiency and effectiveness of the cargo missions flown over these routes and keep cargo flights in the channel route system that DOD relies on to satisfy its training requirements and business obligations to CRAF participants. In May 2012, TRANSCOM issued a memorandum reiterating its policy of restricting commercial aircraft—including CRAF participants—from transporting partial plane loads of cargo over these routes.²⁴ According to TRANSCOM officials responsible for coordinating airlift for DOD, this policy—which has been in place for over a decade—is a tool to help DOD increase the efficiency of its cargo shipments airlifted over channel routes and minimize costs to DOD. DOD officials reported that in the late 1990's and early 2000's commercial air carriers began transporting an increasingly larger share of DOD cargo shipments, leaving a relatively small amount of cargo for military aircraft to transport over channel routes. DOD officials said that before the policy was implemented, military aircraft would often conduct channel route missions with partial loads of cargo, instead of completely filling the aircraft with cargo, which is more cost effective. In addition, in the late 1990's and early 2000's, DOD was experiencing a shortage of flying hours for training. During this same period, commercial carriers were flying a large number of airlift missions,

²⁴ See Memorandum For: International Carriers, Attachment 1, International Air Tender Restricted Routes (May 1, 2012). The memorandum provides that “[a]s a condition of USTC [TRANSCOM] approval of the International Heavyweight Air Tenders, Transportation Service Providers (Carriers/Agents/Forwarders) agree that they will not solicit or perform International Air Tender transportation services for Department of Defense consignors over validated OCONUS channel routes designated as ‘Restricted Routes’ under USTC tenders.” However, the memorandum also provides that carriers are authorized to perform such movement on restricted routes through spot quotes or similar arrangements, once certain requirements have been met. For a copy of TRANSCOM's restricted route policy memo see appendix II of this report.

which exacerbated DOD's flying hour shortage, because many of the airlift missions that military aircrews could have conducted for training purposes were being lost to commercial air carriers. Lastly, according to TRANSCOM officials, because many of the partial planeload missions performed by commercial carriers were negotiated under tender contracting arrangements—which are not included in the annual amount of peacetime business DOD guarantees to the CRAF program—DOD's ability to fulfill its peacetime business obligations to CRAF was being challenged.

The National Airlift Policy states that military and commercial resources are equally important—and interdependent—in fulfilling the national defense airlift objective.²⁵ The policy also provides that the goal of the U.S. government is to maintain in peacetime military airlift resources that are manned, equipped, trained, and operated to ensure the capability to meet wartime requirements. DOD guidance also notes that TRANSCOM may be required to maintain a readiness posture that includes operating military airlift internationally during peacetime, and that it must conduct such operations at the level necessary to meet operational and training requirements.²⁶ According to DOD officials who are responsible for managing DOD's strategic airlift requirements, TRANSCOM takes steps to meet DOD's flying hour training requirements while also providing commercial carriers with peacetime business; however the flying hour training requirement takes precedence. DOD performs a variety of types of airlift missions that allow military aircrews to meet their flying hour training requirements while also delivering the cargo needed to sustain military operations to military units located overseas. These mission types include:

- **Channel airlift missions:** regularly scheduled airlift for movement of sustainment cargo and/or personnel between designated aerial port of embarkation and aerial port of debarkation over validated contingency or distribution channel routes.

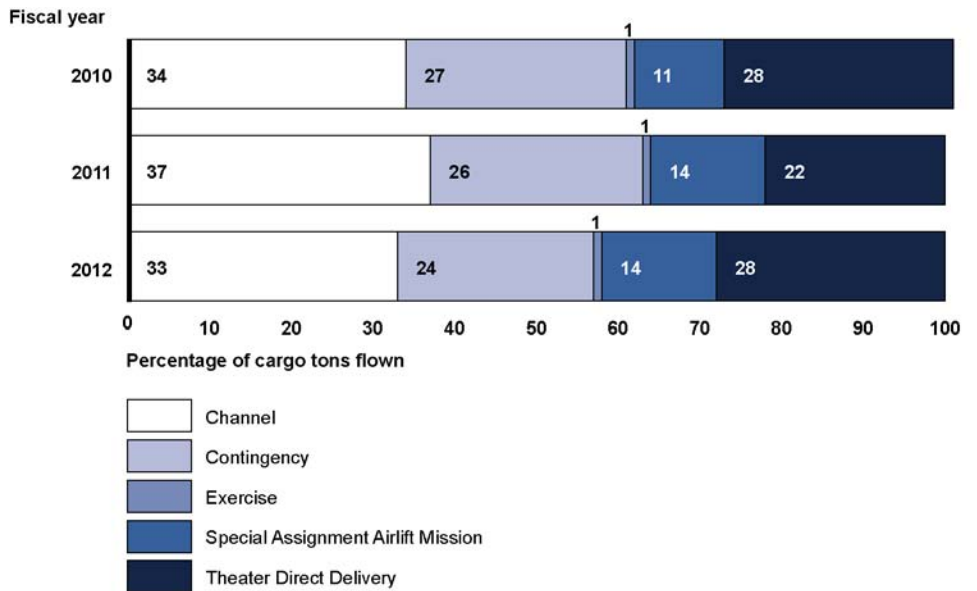
²⁵See National Airlift Policy (June 24, 1987). As described by the policy, the national defense airlift objective is to ensure that military and civil airlift resources will be able to meet defense mobilization and deployment requirements in support of U.S. defense and foreign policies. See *id.*

²⁶See DODI 4500.57, para. 4.4.4 (Mar. 18, 2008).

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- **Special assignment airlift missions:** airlift missions requiring special pickup/delivery at locations other than those established within the approved channel structure or requiring special consideration because of the number of passengers, weight or size of the cargo, urgency or sensitivity of movement, or other special factors.
 - **Contingency missions:** airlift for movement of cargo and/or personnel in support of military operations directed by appropriate authority to protect U.S. interests.
 - **Exercise missions:** airlift for movement of cargo and/or personnel in support of a military maneuver or simulated wartime operation involving planning, preparation, and execution that are carried out for the purpose of training and evaluation.
 - **Theater direct delivery:** a theater-based distribution system wherein delivery to destinations forward of major aerial ports of debarkation can be performed by any available aircraft, including those normally used for intertheater requirements.

Channel route missions are conducted by both military and CRAF participants and account for a large portion of DOD's overall airlift activity. During the last three fiscal years, at least 30 percent of DOD's total cargo movement was over channel routes. See figure 6 below.

Figure 6: Fiscal Years 2010–2012 Cargo Tons Flown by Airlift Mission Type (as Percentages of All Airlift)



Source: GAO analysis of AMC data.

Note: Percentages may not add up to 100 percent due to rounding.

TRANSCOM officials stated that to maximize efficiency, DOD requires aircraft conducting channel route missions—whether they are military or commercial—to be completely full of cargo before takeoff. According to TRANSCOM officials, the policy restricting commercial carriers from transporting partial loads over channel routes provides DOD with a tool to maximize the amount of cargo transported in a single mission over a channel route. Cargo previously transported by commercial carriers in partial loads is now consolidated at aerial ports of embarkation. TRANSCOM officials reported that historically, commercial carriers transporting partial loads had been conducting a large portion of DOD’s airlift business. These commercial airlift missions involved transporting cargo to and from locations that were also being serviced by military aircraft conducting channel missions. DOD was not maximizing the efficiency of its channel route missions and minimizing costs, because aircraft were not filled to capacity. To reduce the redundancy of transporting cargo using both modes of delivery, DOD began restricting commercial carriers from conducting partial plane load missions over channel routes, and it now generally requires commercial aircraft conducting channel missions to be full of cargo before takeoff. According to TRANSCOM officials, the policy ultimately played a role in increasing

the efficiency of DOD's air cargo movements over channel routes. According to a RAND report issued in 2003 that analyzed the costs associated with transporting cargo over channel routes using commercial airlift versus military airlift, DOD would decrease airlift cost if it reduced the amount of cargo transported by commercial carriers conducting partial plane load missions, and shifted that cargo to be transported in a full plane load aircraft.²⁷ Taking this step would be less expensive than allowing military aircraft to conduct partial plane load missions over channel routes.

In addition, DOD's policy allows it to offer more training opportunities for its aircrews during periods of low demand for airlift. Rather than relying on other types of missions—such as contingency missions—to accomplish training, AMC prefers to schedule flying hours for training on channel route missions, which are regularly scheduled, planned in advance, consistent, and predictable. Channel route missions are used to maintain and upgrade pilots' flying skills and, as part of the training, can include transporting cargo from specific military locations within the United States—such as McGuire Air Force Base in New Jersey—to overseas military bases located in countries like Germany or Kuwait. These missions are conducted on a regularly scheduled basis and include DOD cargo, so they provide commanders with reassurance that they will receive planned amounts of sustainment cargo within a designated time frame.

TRANSCOM officials told us that in the late 1990's and early 2000's commercial aircraft had been conducting a large portion of DOD's airlift business, but the overall demand for DOD airlift was relatively low; as a result the military began experiencing a shortage of flying hours to use for training. Many of the airlift missions flown by commercial carriers involved transporting cargo that could have been transported by military aircraft. DOD's policy of restricting commercial carriers from transporting partial loads over channel routes has allowed DOD to shift cargo into the channel route system, increase the number of channel route missions available for aircrews to satisfy flying hour training requirements, and address DOD's flying hour shortage. In 2003, the RAND Corporation

²⁷Brian G. Chow, *The Peacetime Tempo of Air Mobility Operations: Meeting Demand and Maintaining Readiness* (Santa Monica, CA: The RAND Corporation, 2003).

conducted a study²⁸ of the peacetime tempo of DOD's air mobility operations and asserted that DOD needed to take steps to address its shortage of flying hours. The report found that, during fiscal year 2000 and 2001, aircrew personnel encountered a flying hour shortage because international military activity was relatively calm and there were fewer U.S. missions that required airlift support. The report also pointed out that because commercial carriers had begun conducting a large portion of DOD's airlift business, decreasing the amount of airlift business given to commercial carriers would help reverse this trend and help alleviate DOD's flying hour shortage. The report's conclusions supported measures taken by DOD to implement a policy to decrease peacetime business provided to commercial carriers when necessary, to support training requirements. With DOD's policy in place, more cargo was being funneled into the channel route system, and DOD was able to increase the number of channel route missions offered to military aircrews, thereby helping to alleviate the shortage of flying hours.

Further, TRANSCOM officials said that DOD's policy of restricting commercial carriers from transporting partial planeloads of cargo over certain channel routes was also implemented in part to help DOD fulfill its peacetime business obligations to CRAF. Through the CRAF peacetime airlift contract, DOD provides a certain level of airlift business to CRAF participants; DOD negotiates a designated amount of business that it is committed to provide to CRAF participants—as an incentive for commercial carriers to participate in the CRAF program—and distributes this business among the CRAF participants currently enrolled in the program. This business consists, in part, of missions flown across channel routes. TRANSCOM officials reported that many airlift missions conducted by commercial carriers carrying partial loads across channel routes were being arranged through tender-based contractual agreements. Tender-based agreements for airlift services are offers by an air carrier to provide transportation services at a specified rate. According to TRANSCOM officials, business associated with tender-based contracts falls outside of the CRAF peacetime business entitlement obligation. TRANSCOM officials said that this practice was diminishing the pool of peacetime business that DOD could provide to CRAF participants under the CRAF peacetime business entitlement process.

²⁸Brian G. Chow, *The Peacetime Tempo of Air Mobility Operations: Meeting Demand and Maintaining Readiness* (Santa Monica, CA: The RAND Corporation, 2003)

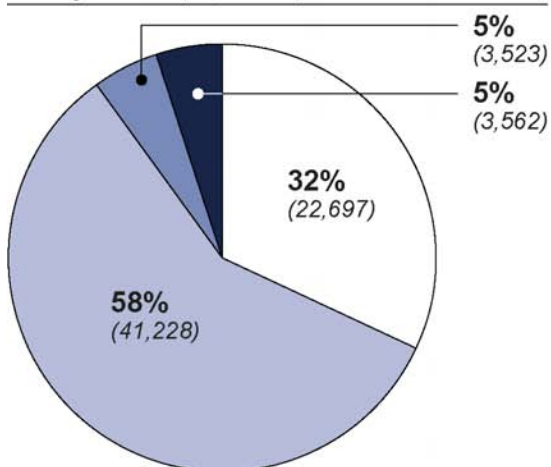
According to TRANSCOM officials, the policy limiting the amount of tender-related airlift business provided to commercial carriers increases the efficiency of channel route missions, alleviates the shortage of flying hours for training, and allows DOD to provide CRAF participants with peacetime business to fulfill its CRAF peacetime business obligations. In addition, TRANSCOM officials said that in periods of high demand for airlift, such as the last several years, DOD can provide CRAF participants with more channel route business, because military aircrews can satisfy their training requirements for flying hours by conducting other airlift missions, such as contingency and special assignment airlift missions.

Some CRAF participants expressed concerns to us that the original rationale for DOD's policy no longer exists and that the policy may prevent DOD from using the less costly commercial airlift option to transport partial loads of cargo over channel routes. First, according to TRANSCOM officials, the original rationale for the policy was to ensure that DOD could provide sufficient flying hours to train its aircrews. Two of the CRAF participants we interviewed stated that this policy was no longer necessary because DOD no longer faces flying hour shortages as it did in the late 1990's and early 2000's. DOD officials stated that it is important to retain this policy as a management tool, especially since DOD's need for airlift is projected to return to pre-September 2001 levels by 2015. According to DOD officials, data from fiscal year 2000 illustrate this point; in 2000, DOD needed to reserve about 57 percent of its channel route missions for training and provided about 28 percent of the channel route missions to CRAF participants. In contrast, during a period of high demand for airlift, such as fiscal year 2012, DOD reserved about 31 percent of its channel route missions for training and was able to provide more than 60 percent of its channel route missions to CRAF participants. See figure 7 below.

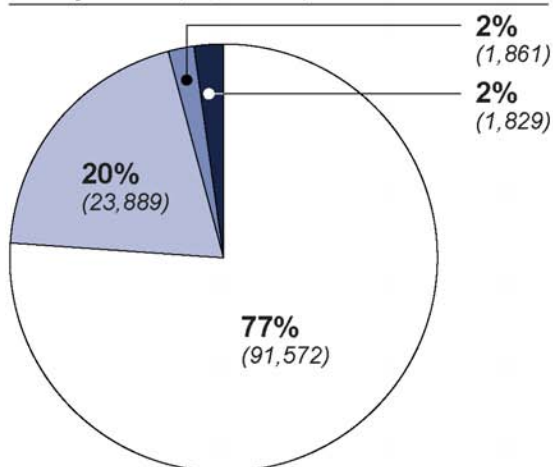
Figure 7: Commercial versus Military Channel Route Movements for Fiscal Years 2000 and 2012

Commercial vs. Military Channel Movements (by tonnage)

Fiscal year 2000 (71,010 tons)

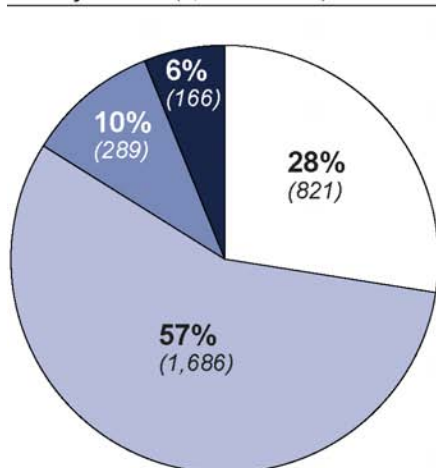


Fiscal year 2012 (119,151 tons)

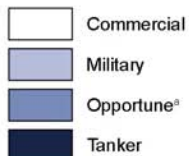
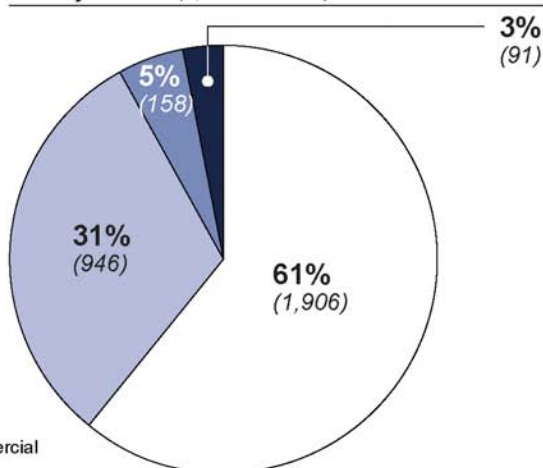


Commercial vs. Military Channel Movements (by mission)

Fiscal year 2000 (2,962 missions)



Fiscal year 2012 (3,101 missions)



Source: GAO analysis of AMC's FY 2000 and FY 2012 Channel Performance and Analysis Reports.

Note: Percentages may not add up to 100 percent due to rounding.

^aOpportune missions are specific training missions not already committed to a designated airlift mission, such as contingency or exercise airlift missions. Military aircraft conducting opportune missions transport cargo in the remaining space available aboard the aircraft.

Second, a CRAF participant we met with emphasized that using commercial aircraft to transport partial loads is less costly than using military aircraft to transport partial loads, because when using commercial airlift, DOD pays by the pound and only for the cargo airlifted, rather than incurring the entire cost of using a military aircraft to carry a partial load. DOD officials acknowledge that using commercial carriers to transport partial plane loads of cargo is less expensive than using military aircraft for this purpose and note that the policy restricting commercial carriers from transporting partial plane loads of cargo over certain overseas channel routes has a provision to allow commercial carriers to conduct such missions on a case-by-case basis, when needed to meet DOD's requirements. For example, if a customer requires a critical, time-sensitive item and cannot wait for it to be transported by a regularly scheduled channel mission, commanders still may have the option to use a commercial carrier to transport a partial load to a designated location using a channel route. In addition, commercial carriers can transport cargo outside the channel route system under a variety of other DOD airlift transportation contracts. For example, TRANSCOM's World-Wide Express program, an airlift transportation program available only to CRAF participants, is used to provide international commercial express package transportation service for shipments up to and including 300 pounds. This program provides DOD with the ability to ensure that commanders can receive unique, time-sensitive cargo items when no channel mission is available within a specified time frame. Over the last five years, this program has consistently generated over \$100 million dollars worth of airlift business annually for CRAF participants.

According to TRANSCOM and AMC analysis, as the drawdown efforts in Afghanistan proceed over the next few years, airlift demand is expected to decline to pre-September 11, 2001 levels. It will therefore be important for DOD to plan and ensure that military aircrews are provided with ample opportunity to fulfill training requirements and avoid a shortage of flying hours. In preparation for this decline in the demand for airlift, TRANSCOM officials emphasized that DOD's policy to restrict commercial carriers from transporting partial loads over channel routes may continue to serve as an important management tool and allow DOD to balance the goals of operating its channel route system as efficiently as possible, providing enough training opportunities to military aircrews, and fulfilling its CRAF peacetime business obligations.

Adequacy of CRAF to Meet Future Mission Needs is Unclear until DOD Completes Several Assessments

DOD is conducting several interrelated studies to determine its future airlift requirements; however it is unclear whether the planned size of CRAF will be adequate to meet future airlift requirements. The National Defense Authorization Act for Fiscal Year 2013 requires DOD to conduct a study that assesses its mobility needs—referred to as the Mobility Requirements and Capabilities Study 2018,²⁹ which DOD had not begun at the time of our review. In addition, in response to the changing business environment, AMC is also conducting a two-phase study to assess the readiness of CRAF participants to augment DOD's airlift capacity and the viability of the CRAF program. The CRAF Phase 1 study was completed in December 2012, and according to officials the Phase 2 is scheduled to be completed in the fall of 2013. Meanwhile, DOD has been taking steps to continue to encourage commercial carriers to participate in the program. Until DOD finalizes these assessments, it will be unclear whether the planned size of CRAF will be adequate to meet future airlift requirements.

DOD's Mission Needs for CRAF Have Changed Since its Last Assessment of Future Requirements

DOD reports that there are more aircraft committed to the CRAF program than are needed to fulfill the wartime requirements established by the Mobility Capability Requirements Study 2016 (MCRS-16), which was issued in 2010. However, it is not clear whether the current level of CRAF participation will provide the right number and mix of aircraft to meet future requirements, since DOD has issued new strategic guidance that may affect DOD's airlift requirements.

While the number of aircraft pledged to the program has fluctuated, DOD's past analysis showed that the projected size and mix of the CRAF fleet was more than adequate to satisfy all war planning scenarios established by the MCRS-16. According to DOD data, as of March 2012, CRAF participants had enrolled 15 percent more aircraft in the program than would be needed to meet established airlift requirements. The MCRS-16 assessed components of the mobility capabilities that DOD would need for possible future strategic environments and was intended to help DOD make investment decisions regarding mobility systems, such as how much to invest in strategic airlift to meet wartime needs. Among other things, the study examined how changes in the mobility system affect the outcomes of major operations and assessed the associated

²⁹See Pub. L. No. 112-239, § 141(c) (2013).

risks. The MCRS–16 determined that, with few exceptions, the mobility capabilities projected for 2016 would be sufficient to support the most demanding projected requirements. The study assessed the major mobility systems required to move personnel and supplies from their point of origin to their destination: sealift, surface transportation, and airlift components, to include strategic airlift, aerial refueling, and CRAF passenger and cargo. To support decisions regarding future mobility force structure, the MCRS–16 developed three demanding cases consisting of conflicts and natural disasters with multiple scenarios occurring over a 7-year period and requiring the use of mobility capabilities. The MCRS–16 used approved DOD planning scenarios to develop the three cases. For example, in one case, U.S. forces might be required to conduct a large land campaign and a long-term irregular warfare campaign while also responding to homeland defense missions. In another case, U.S. forces might be conducting two nearly simultaneous large-scale campaigns, while also responding to three nearly simultaneous domestic events and conducting other operations.

Since its last assessment of its airlift requirements in 2010, DOD has issued new strategic guidance. Specifically, DOD's strategic guidance issued in January 2012 calls for, among other things, an increased focus on the Asia-Pacific region and resizing U.S. forces,³⁰ both of which may affect airlift needs. For example, an increased focus on the Asia-Pacific region could affect operational plans in that theater and require changes to the number and type of forces assigned to the region, as well as the associated airlift requirements. In addition, the resizing of DOD forces to achieve security objectives could have implications for the choice of commercial and military aircraft used to support future military operations. In March 2013, the Secretary of Defense tasked DOD senior leadership to examine the department's strategic assumptions, following up on the January 2012 Defense Strategic Guidance which, among other things, called for rebalancing military forces toward the Asia-Pacific region. This review examines the choices underlying the department's strategy, force posture, investments, and institutional management, as well as past and future assumptions, systems, and practices. The results of the review will frame the secretary's guidance for the fiscal 2015 budget and will be the

³⁰DOD, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*. (Washington, D.C.: Jan. 3, 2012).

foundation for the Quadrennial Defense Review expected to be issued in February 2014.

DOD Is Updating Its Future Airlift Requirements to Reflect Strategy Changes and Reassess the Incentives for CRAF Participants

The National Defense Authorization Act (NDAA) for Fiscal Year 2013 requires DOD to conduct a new mobility capabilities requirements study—referred to as the Mobility Requirements and Capabilities Study 2018 (MRCS–18)—based in part on the new defense strategy mentioned above.³¹ This new assessment may provide decision makers with the analytical data needed to determine DOD’s airlift capability requirements and the number and type of aircraft CRAF participants would need to pledge to the program in order to support these requirements. Among other things, the NDAA requires DOD to

- describe and analyze the assumptions made by the Commander of the U.S. Transportation Command with respect to aircraft usage rates, aircraft mission availability rates, aircraft mission capability rates, aircrew ratios, aircrew production, and aircrew readiness rates;
- assess the requirements and capabilities for major combat operations, lesser contingency operations as specified in the Baseline Security Posture of the Department of Defense, homeland defense, defense support to civilian authorities, other strategic missions related to national missions, global strike, the strategic nuclear mission, and direct support and time-sensitive airlift missions of the military departments; and
- identify mobility capability gaps, shortfalls, overlaps, or excesses and assess the risks associated with the ability to conduct operations and recommended mitigation strategies where possible.³²

Until DOD completes the MRCS–18, decision makers in DOD and Congress may not have all of the relevant information they need to ensure that DOD’s mobility capabilities and requirements are sized most effectively and efficiently to support the U.S. defense strategy. DOD acknowledges the requirements set forth in the National Defense Authorization Act for Fiscal Year 2013 and fully intends to cooperate and

³¹ See § 141(c). Specifically, the provision requires DOD to conduct a study that assesses the end-to-end, full-spectrum mobility requirements for all aspects of the National Military Strategy derived from the National Defense Strategy that is a result of the 2012 Defense Strategic Guidance and other DOD planning documents. See § 141(c)(1).

³² See § 141(c)(2)(B), (E), (G).

work to complete the assessment, but according to AMC and TRANSCOM officials, no time frame has been established for when this study will be completed.

Further, AMC has begun conducting additional studies to assess its airlift requirements and how the CRAF program will support near-term and long-term requirements. AMC's CRAF study is being conducted in two phases and will help AMC to ensure that the commercial airlift forces associated with the CRAF program are prepared to support the drawdown of forces in Afghanistan by the end of calendar year 2014. Phase 1 of the CRAF study, completed in December 2012, focused on the international long-range segment of CRAF, which will be most affected by the decreasing demand for airlift resulting from the drawdown of forces in Afghanistan. It identifies a series of issues facing CRAF during the withdrawal and for the short term following the drawdown. A number of observations are directly related to the drawdown period and the period immediately following. These require near-term actions to ensure that commercial airlift support will be available when it is needed to support national interests. For example, the Phase 1 study noted that a future study should assess the risk and reward factors that may affect further CRAF participation due in part to the state of flux in the current charter air industry resulting from economic pressures brought on by a decline in commercial passenger charter opportunities.

In addition to discussing certain recommendations from the Phase 1 study, Phase 2 of the CRAF study will focus on maintaining the future viability of the CRAF program and its readiness to augment military airlift capability and support surge requirements. This follow-on study will undertake an in-depth analysis of issues identified in Phase 1 that could affect the long-term viability and reliability of the CRAF program. The findings from the Phase 2 study will propose courses of action and mitigation strategies to ensure CRAF readiness now and in the future, balancing government interests and mandates with the dynamics of the changing industry. Furthermore, the CRAF Phase 2 study will evaluate the market, the carriers and their business base, and the existing business models within industry and government in order to provide insights and recommend actions to ensure that the CRAF program can continue to meet wartime requirements in the future. AMC and TRANSCOM expect this study to be completed by the fall of 2013.

According to AMC officials, one of the issues that will be addressed in the Phase 2 study is the recommendation from the Phase 1 study that DOD continue the suspension of the 60/40 rule through fiscal year 2014. The

60/40 rule was created as a safeguard for DOD. Under the 60/40 rule, DOD business cannot provide more than 40 percent of a carrier's revenue and the remaining 60 percent of the carrier's revenue must be earned through sources other than DOD, generally referred to as commercial sources or commercial air transportation. Carriers that earn more than 40 percent of their revenue from DOD may be penalized by reductions in their entitlement to DOD business. Prior to fiscal year 2010, the rule was based on an air carrier's revenue. However, in 2010 the rule was modified so that it calculated the percentage of business in block hours³³ rather than amount of revenue. As of May 2010, the rule has been suspended. One of the original goals of the 60/40 rule was to ensure that CRAF carriers maintained a strong commercial business base, efficient operations, and modern fleets to help prevent them from going out of business when DOD demands were low. Limiting the proportion of DOD business carriers could have would also provide DOD with a surge capability to draw on if demand grew suddenly. According to TRANSCOM and AMC officials, the 60/40 rule was suspended so that commercial carriers would not be penalized for supporting increased DOD airlift demands. If carriers continued to increase support while still being required to observe the 60/40 rule, the rule would prove to be counterproductive. DOD would be asking for increased support while potentially issuing penalties to those carriers providing the increased support. Some of the carriers we spoke with stated that the 60/40 rule had not been strictly enforced and that the suspension of the rule had no effect on the amount of business they received as a result of participating in the CRAF program. However, according to DOD officials, five carriers have gone bankrupt in the last three years and two of them have stopped offering airlift services even though this rule has been suspended.

Based on data included in the MCRS-16, DOD counts on the CRAF program to provide most of the passenger airlift services as well as a significant amount of the cargo services to support wartime requirements. Therefore, CRAF must maintain the ability to respond in order to meet combatant commander requirements. DOD must develop accurate requirements if CRAF is to maintain the ability to respond to these requirements. For that reason, until DOD completes the MRCS-18 and

³³Block hours include not only actual flight time, but also taxi time before take-off and after a landing.

the CRAF Phase 2 study, it will be unable to determine the correct size and mix of the CRAF fleet to meet future airlift requirements.

Conclusions

The nature of U.S. military operations in today's global environment requires DOD to be able to rapidly deploy personnel and cargo around the world and sustain forward deployed forces. DOD has taken a number of steps to strengthen the CRAF program while also ensuring that military aircrews receive required training. However, over the last few years, DOD has flown more hours than required to train its aircrews, thereby possibly reducing the level of peacetime business available to CRAF participants. The anticipated decline in DOD's peacetime business over the next few years, combined with continuing business pressures in a highly competitive industry, highlight the need for a process to ensure that DOD maximizes the use of its commercial partners. However, DOD does not use the process it has for monitoring training hours to determine when it can allocate eligible airlift missions to CRAF participants. If DOD does not use the information provided by its existing process, it will be unable to determine whether it is using commercial carriers to the maximum extent practicable, as required by DOD guidance. Further, DOD may be using its military fleet—which officials say is more expensive to operate than commercial alternatives—more than necessary, while risking the CRAF participation needed to ensure wartime readiness.

Recommendation for Executive Action

To balance the use of military and civilian aircraft and ensure that commercial carriers participating in the CRAF program are used to the maximum extent practicable, we recommend that the Secretary of Defense direct the Secretary of the Air Force and the Commander, U.S. Transportation Command—in conjunction with the Commander, Air Mobility Command—to use the Air Mobility Command's existing process for monitoring training hours to determine when it can shift eligible peacetime airlift workload from military to commercial sources.

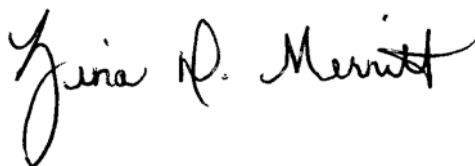
Agency Comments

We provided a draft of this report to DOD for comment. In its written comments, reproduced in appendix IV, DOD concurred with our recommendation and stated that it believes implementing the recommendation will further improve the Civil Reserve Air Fleet program.

We are sending copies of this report to appropriate congressional committees, the Secretary of Defense, the Secretary of the Air Force, the

Under Secretary of Defense (Acquisition, Technology and Logistics), and the Commander, Air Mobility Command. In addition, this report will be available at no charge on the GAO Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-5257 or merrittz@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix V.

A handwritten signature in black ink, reading "Zina D. Merritt". The signature is fluid and cursive, with the first name "Zina" being the most prominent.

Zina D. Merritt
Director
Defense Capabilities and Management

List of Committees

The Honorable Carl Levin
Chairman
The Honorable James Inhofe
Ranking Member
Committee on Armed Services
United States Senate

The Honorable Dick Durbin
Chairman
The Honorable Thad Cochran
Ranking Member
Subcommittee on Defense
Committee on Appropriations
United States Senate

The Honorable Howard P. "Buck" McKeon
Chairman
The Honorable Adam Smith
Ranking Member
Committee on Armed Services
House of Representatives

The Honorable C.W. "Bill" Young
Chairman
The Honorable Pete Visclosky
Ranking Member
Subcommittee on Defense
Committee on Appropriations
House of Representatives

Appendix I: Scope and Methodology

To determine whether DOD has been meeting its training requirements we reviewed Air Force guidance on the development of flying hour requirements, as well as DOD guidance on flying hours for training.¹ We also spoke with officials from U.S. Transportation Command (TRANSCOM) and Air Mobility Command (AMC) about how the training requirements are developed. We then analyzed flying hour data from the Reliability and Maintainability Information System (REMIS) to determine the extent to which the airlift fleet—C-5, C-17, and C-130—was being flown in excess of training requirements. We assessed the reliability of these data by interviewing officials from the REMIS program office at the Air Force Life Cycle Management Center to understand the steps that have been taken to ensure the reliability of the database. In addition, we reviewed documentation relating to the system and compared the data with alternate sources. We concluded that the data from REMIS were reliable for the purposes of this engagement. We then compared the flying hour data from REMIS to the flying hour requirements developed by AMC. To determine whether DOD was providing Civil Reserve Air Fleet (CRAF) participants with peacetime business, we interviewed officials with TRANSCOM and AMC on the management of the CRAF program, recent changes that had been made to the program, and concerns about the future of the program. In addition, we conducted interviews with representatives from 21 of the 30 CRAF participants who responded to our request for an interview in October and November 2012, to obtain information on the CRAF program, their perspective on what elements of the program worked and which did not, and their willingness to participate in the program in the near future. Since that time, 2 CRAF participants—one of which we interviewed—have gone out of business and are no longer members of the CRAF program. As of April 2013, there were 28 CRAF participants included in the CRAF program. We also analyzed program-related documents from TRANSCOM, AMC, and CRAF participants, as well as guidance on the use of CRAF and commercial transportation. Furthermore, we analyzed data from fiscal years 2001 through 2012 from two systems—the Commercial Operations Integrated System and an internal database managed by the Tanker Airlift Command Center (TACC) within AMC—to understand the extent to which CRAF participants are used compared with military airlift and foreign

¹See, e.g., Air Force Instruction 11-102, Flying Hour Program Management (Aug. 30, 2011); DODI 4500.57, para. 4.4.4 (Mar. 18, 2008); Air Force Instruction 11-101, Management Reports On The Flying Hour Program (Nov. 1, 2002) (certified current Dec. 31, 2009).

carriers. We assessed the reliability of these sources by reviewing documentation on the systems, comparing these data with data from alternate sources and conducting interviews with knowledgeable officials. We concluded that the data from these systems were reliable for the purposes of this engagement.

To assess the extent to which DOD has justified restricting commercial carriers from transporting partial plane loads of cargo over channel routes, we reviewed DOD's policy for restricting commercial carriers from flying over channel routes.² The policy we reviewed helped us identify which channel routes were designated as restricted. We then conducted interviews with TRANSCOM and AMC officials to obtain information on the rationale for creating the policy and what operational and strategic benefits the policy provides for DOD. In addition, we reviewed fiscal year 2000 and fiscal year 2012 channel route airlift transportation data to determine the extent to which DOD was using military aircraft rather than CRAF participants to conduct channel route missions, and we discussed the circumstances surrounding those decisions with TRANSCOM officials. We also conducted interviews and obtained written responses from CRAF participants to obtain additional perspectives on how the policy is affecting the CRAF program. We also reviewed previously written reports and studies conducted by the RAND Corporation and the Council for Logistics Research Inc. that addressed DOD's use of channel routes, the impact of utilizing commercial carriers in lieu of military aircraft on DOD's aircrew training program, and the impacts the policy has had on overall cargo management. Reviewing this historical information provided us with additional insight into DOD's justification for implementing the policy.

To assess whether DOD has established future requirements for the CRAF program and how the planned size of CRAF compares with those requirements, we obtained and reviewed various studies conducted by DOD to assess its strategic airlift capabilities, such as DOD's Mobility Requirements and Capabilities Study – 2016, and the AMC 2012 CRAF study. We also collected fiscal year 2011 through 2013 data documenting DOD's current inventory of CRAF aircraft and compared these data with DOD's current airlift requirements. In addition, we conducted interviews

²See, e.g., Memorandum For: International Carriers, Attachment 1, International Air Tender Restricted Routes (May 1, 2012).

with TRANSCOM and AMC officials to determine what steps are being taken to establish future requirements and to gain their perspective on the challenges they expect to face as they continue to manage the CRAF program. We also reviewed a provision in the National Defense Authorization Act for Fiscal Year 2013 that requires DOD to conduct a new study of mobility capabilities and requirements. We discussed the status of the requirement with TRANSCOM and AMC officials to determine what time frames and milestones have been established to begin and complete this study. We also reviewed DOD's defense strategic guidance issued in January 2012 to assess factors that may affect DOD's future airlift needs.

To gather information for these objectives, we reviewed documentation and interviewed officials from the following organizations:

DOD

- The Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics
 - Office of the Deputy Assistant Secretary of Defense (Transportation Policy)
- U.S. Transportation Command
 - J-3 Operations and Plans, Sustainment Division (TCJ3-G)
 - Strategy, Policy, and Logistics (TCJ5/4)
 - Acquisition (TCAQ)
 - Office of the Staff Judge Advocate (TCJA)
 - Enterprise Readiness Center (ERC)
- Air Mobility Command
 - 618th Air and Space Operations Center (TACC)
 - Commercial Airlift Division (A3B)

Private Sector CRAF Participants

- See appendix III for the CRAF participants we interviewed
- National Air Cargo Association (NACA)

We conducted this performance audit from August 2012 to June 2013 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain

sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence and data obtained was sufficiently reliable for our purposes, and provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: U.S. Transportation Command Restricted Route Policy

MEMORANDUM FOR: International Carriers
Attachment 1
International Air Tender Restricted Routes
1 May 2012

Continued Policy Position 1 May 2012

As a condition of USTC approval of the International Heavyweight Air Tenders, Transportation Service Providers (Carriers/Agents/Forwarders) agree that they will not solicit or perform International Air Tender transportation services for Department of Defense consignors over validated OCONUS channel routes designated as "Restricted Routes" under USTC tenders.

Carriers are authorized to perform International Air Tender movement on Restricted Routes via "Spot Quotes" (or similar arrangements) for the DOD once the Transportation Officer has received/completed the requirements annotated in the DTR 4500.9R, Part II, Chapter 202, Paragraph Y.3.a.

International Routes

United States	Afghanistan
United States	Germany
United States	Guam
United States	Italy
United States	Spain
United States	Japan
United States	Okinawa
United States	Korea
United States	Kuwait
United States	Bahrain
United States	Qatar
United States	Turkey
United States	United Kingdom
Germany	Afghanistan
Germany	Italy
Germany	Turkey
Germany	Kuwait
Germany	Qatar
All	Diego Garcia BIOT #
All	Guantanamo Bay, Cuba #

CONUS Routes

United States	Alaska
United States	Hawaii

= No Commercial lift available to these areas

Notes: United States includes all 50 states. Restriction applies both ways for all route pairs.

OPR: USAF HQ AMC/A4TC Aerial Port Lane (DSN 779-4434 Comm 618-229-4434)

Partnered with USTC/J3-G/J3-S, USTC/J5/4-LD, USTC/AC

Coordinated by USTC TCAQ-CI/ dorothy.harris@ustranscom.mil (DSN 770-7068 Comm 618-220-7068)

Appendix III: List of Civil Reserve Air Fleet Participants (As of April 2013)

CRAF Carrier	Interviewed
1. ABX Air, Inc.	√
2. Air Transport International LLC	√
3. Alaska Airlines, Inc.	√
4. Allegiant Air LLC	
5. American Airlines, Inc.	
6. Atlas Air, Inc.	√
7. Delta Air Lines, Inc.	√
8. Evergreen International Airlines, Inc.	√
9. Federal Express Corp.	√
10. Hawaiian Airlines, Inc.	
11. Jet Blue Airways Corp.	√
12. Kalitta Air LLC	
13. Lynden Air Cargo LLC	√
14. Miami Air International, Inc.	√
15. MN Airlines LLC (DBA Sun Country Airlines)	√
16. National Air Cargo Group, Inc.(DBA Murray DBA National Airlines)	√
17. North American Airlines, Inc.	
18. Northern Air Cargo	
19. Omni Air International, Inc.	√
20. Polar Air Cargo Worldwide, Inc.	√
21. Ryan International Airlines, Inc*	√
22. Sky Lease 1, Inc. (DBA Trade Winds Airlines)	√
23. Southern Air, Inc.	√
24. Southwest Airlines Company	√
25. Tatonduk Outfitters, Ltd. (DBA Everts Air Cargo)	√
26. United Airlines, Inc.	√
27. United Parcel Service Company	√
28. US Airways, Inc.	
29. World Airways, Inc.	

Source: GAO.

Note: Ryan International Airlines, Inc which previously declared bankruptcy has gone out of business since our meeting and was not a CRAF participant in April 2013.

Appendix IV: Comments from the Department of Defense



LOGISTICS AND
MATERIEL READINESS

ASSISTANT SECRETARY OF DEFENSE
3500 DEFENSE PENTAGON
WASHINGTON, DC 20301-3500

JUN 18 2013

Ms. Zina Merritt
Director
Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. Merritt:

This is the Department of Defense response to the GAO Draft Report, GAO-13-564, "MILITARY AIRLIFT: DOD Needs to Take Steps to Manage Workload Distributed to the Civil Reserve Air Fleet," dated May 17, 2013 (GAO Code 351765).

DoD has reviewed the report and concurs with the recommendation that "the Secretary of Defense direct the Secretary of the Air Force and the Commander, U.S. Transportation Command—in conjunction with the Commander, Air Mobility Command—to use the Air Mobility Command's existing process for monitoring training hours to determine when it can shift eligible peacetime airlift workload from military to commercial sources." The Department believes this will further improve the Civil Reserve Air Fleet program, and appreciates the opportunity to comment on the draft report.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Esteyez", is positioned above the printed name "Alan F. Esteyez".

Alan F. Esteyez

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

Zina D. Merritt, (202) 512- 5257 or merrittz@gao.gov

Staff Acknowledgments

In addition to the contact named above, Suzanne Wren, Assistant Director; Jim Ashley; Namita Bhatia-Sabharwal; Jason Jackson; James Lackey; Joanne Landesman; Tamiya Lunsford; Michael Shanahan; Mike Shaughnessy; and Amie Steele made key contributions to this report.

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